

### REMARKS

In the Office Action dated August 13, 2004, the Examiner rejected claims 29-46 under Section 102(b) as being anticipated by May and Baudry. The Examiner did not address claims 1-15 in the office action as the Examiner deemed the claims withdrawn. Applicants respectfully disagree with the Examiner. As the Applicants urged in their previous reply dated June 14, 2004, "Claims to be restricted to a different species must be mutually exclusive." MPEP 806.04(f). Independent Claim 1 reads on Figures 2 and 3 (requiring an apertured member adjacent the ignition source) and not Figure 1. Independent Claims 29 and 35 read on all three figures. Independent Claims 29 and 35 each have dependent claims directed to an embodiment including an apertured member. Therefore, as Claims 1, 29 and 35 are not mutually exclusive, Applicants disagree with the Examiner's deemed withdrawal of independent Claim 1 and its dependent Claims 2-15. As amended in this response, Claims 29 and 35 are allowable generic claims. Applicants request the Examiner remove the restriction requirement regarding claims 1-15.

Applicants have amended independent article Claims 1 and 35 to include a limitation that the auxiliary combustion cavity is adapted to receive a portion of the *dilute* combustion mixture from the main combustion chamber and amended independent method Claim 29 to include the limitation that the auxiliary combustion cavity receive a portion of the *dilute* combustion mixture from the main combustion chamber. Applicant submits that as amended Claims 1, 29 and 35 define over the May and Baudry references. The May reference discloses "an auxiliary combustion chamber 22 that communicates with a main combustion chamber 24 of an internal combustion engine 26. A relatively rich air-fuel mixture is introduced into the auxiliary combustion chamber 22 from a simple auxiliary carburetor 28." (May, Col. 1 lines 57-63). Applicant's claimed invention receives a dilute charge mixture from the main combustion chamber and not a rich charge mixture from an auxiliary carburetor. Therefore Applicants' claimed invention is not anticipated by or obvious in view of May. The Baudry reference discloses a pre-chamber 13 in which electrodes 4 of spark plug 5 are positioned. A channel 2 communicates with channel 9 to deliver a rich mixture by means of orifices 8 and 10 to the opening 12 in the bottom of the pre-chamber 13. (Baudry, Col. 3, lines 11-33). Baudry teaches a method comprising "admitting into the combustion chamber of an engine two streams of

different degrees of richness (of which the poorer one may be air), by means of two channels . . . a pre-chamber having at least one orifice located substantially in the flow path of the rich mixture directed toward the electrodes." (Baudry, Col. 2, lines 56-71). Applicants' claimed invention receives a dilute charge mixture from the main combustion chamber and not a rich charge mixture from an auxiliary carburetor. Therefore Applicants' claimed invention is not anticipated by or obvious in view of Baudry.


Applicants have canceled dependent claims 2 and 36. Applicants have amended dependent claims 3, 4, 5, 7, 13, 14, 37, 38, 40, 45, and 46 and added new claims 47 and 48 to more distinctly and clearly claim the invention. Applicants submit that any amendments made to the dependent claims were not made to define over the recited references. All the dependent claims are dependent from an allowable independent claim and therefore incorporate the limitations of their independent claims. Hence the dependent claims are allowable for at least the same reasons heretofore discussed with respect to their independent claims.

It is believed no additional fees are due with this paper. If any fees are due, please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: \_\_\_\_\_

10/20/04

  
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